

## Publications by Weather Bureau Authors

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- J. D. Kangos, "A Preliminary Investigation of the Heat Flux from the Ocean to the Atmosphere in the Antarctic Region," *Journal of Geophysical Research*, vol. 65, No. 12, Dec. 1960, pp. 4007-4012.
- A. L. King, "Drainage, A Vital Need in Irrigated Humid Areas," *Journal of the Irrigation and Drainage Division, Proceedings of the American Society of Civil Engineers*, vol. 86, No. IR4, Dec. 1960, pp. 81-100.
- P. M. Kuhn (with C. B. Tanner and J. A. Businger), "The Economical Net Radiometer," *Journal of Geophysical Research*, vol. 65, No. 11, Nov. 1960, pp. 3657-3667.
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- M. J. Rubin, "Review of 'Notes on Weather Analysis in the Falkland Islands Dependencies, Antarctica,' by A. W. Mansfield and S. D. Glassy, *Scientific Report No. 16, Falkland Islands Dependencies Survey, Colonial Office, London, 1957*," *Bulletin of the American Meteorological Society*, vol. 41, No. 12, Dec. 1960, p. 703.
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- H. Wexler, "Meteorology," in Chapter III "The Earth," pp. 14-22 of *Science in Space*, Space Science Board, NAS-NRS, 1960.
- H. Wexler, "Review of *Atlantic Hurricanes* by G. E. Dunn and B. I. Miller, Louisiana State University Press, 1960 326 pp.," *Science*, vol. 132, No. 3437, Nov. 11, 1960, p. 1392.
- C. L. Woffinden, "Blocking Action," Letter to Editor, *The Meteorological Magazine*, vol. 89, No. 1058, Sept. 1960, pp. 236-240.

## New Weather Bureau Publication

*Research Paper No. 42, "A Detailed Analysis of the Fargo Tornadoes of June 20, 1957,"* by T. Fujita, U.S. Weather Bureau, Washington, D.C., 1960, 67 pp. For sale by Superintendent of Documents, U.S. Government Printing Office, Washington 25, D.C. Price: 45 cents.

The research reported in this paper was conducted by the University of Chicago for the U.S. Weather Bureau. Using the abundant photographs of the five individual tornadoes of this family, the author successfully triangulated the dimensions of the system from the tornado funnel to the entire rotating cloud. Important results in regard to the intense vertical motion inside the wall cloud and the possibility of liquid water storage inside the rotating cloud will lead to future theoretical studies of tornadoes and their related systems. Numerous photographs show the tornadoes in action.